

Fabric Infrastructure and Operations



Options for SLC at CERN

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Options

- CERN**| T**Department
- Progressively deliver SLC5 services (test clusters, build services, ...) leading to introduction of batch and interactive services in ~September and phase out of SLC4 in Q1 09.
- Skip RHES5 based platform, introduce SLC6 services from delivery of RHES6 (expected Q4 08 - Q1 09); phase out SLC4 in Q4 09.
- NOT an option:
 - Develop SLC5 service support infrastructure without deployment of batch & interactive services.





Requests for SLC5

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- Install service
 - ATLAS (hardware compatibility tests)
- Test environment
 - ALICE/ATLAS/CMS
 - Do SLC4 binaries run on SLC5?
 - Does code compile with gcc4?
- Build services
 - ATLAS
 - Full SLC5 s/w release planned for early 08 (status unclear)







SLC4->SLC5



Risks

- Stability only just achieved on SLC4; can we move rapidly to SLC5?
 - Many fewer changes to Grid middleware; GD opinion is that migration is possible.
- Short timeframe to deliver services (and experiment software); effort in 2008 in parallel with CCRC & LHC startup
- Advantages
 - Avoid SLC4->SLC6 risks...





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Risks

- RHES4 support for new hardware ends in April 08
 - Higher price/performance for 2009 hardware?
- Release timescale for RHES6 uncertain
 - "Autumn 08", but RHES5 slipped 6 months; if RHES6 arrives in "Spring 09", deployment of SLC6 services and software testing before end-09 would be very tight.
- Relax of focus on middleware (and software) portability.
 - May further complicate migration to SLC6
- Advantages
 - Avoid SLC4->SLC5 risks...







Recommendation



- IT/FIO & IT/GD recommend
 - development of SLC5 services at CERN during 2008,
 - introduction of production batch and interactive services in September, and
 - phasing out SLC4 batch and interactive services during Q1 2009.







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Backup Slide







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SL & SLC



- RHES, SL and SLC are (should be) identical as far as an end-user binary is concerned.
 - Same applies to SLF.
 - Any violation of this principle is a bug and will be fixed.
- CERN customisation needed to
 - ease installation of standard options at CERN (AFS, ...)
 - add support for, e.g., XFS
- Requirements are continually reviewed.
 - If/when possible, SL"C" will become simple set of add-on packages, not a distinct distribution.